

DOCUMENT RESUME

ED 091 263

SO 007 388

AUTHOR Van Dusen, Roxann A.
TITLE International Social Indicators: An Overview of On-Going Activities.
PUB DATE 21 Mar 74
NOTE 14p.; Paper presented at the International Studies Association Meeting (St. Louis, Missouri, March 21, 1974).

EDRS PRICE MF-\$0.75 HC-\$1.50 PLUS POSTAGE
DESCRIPTORS Data Analysis; Data Bases; *Data Collection; *International Programs; *National Surveys; Program Evaluation; Research Design; *Research Methodology; *Social Change; Social Environment; Tables (Data)
IDENTIFIERS *Social Indicators

ABSTRACT

International social indicators, focusing on assessment of the quality of life, measurement of social changes, and program evaluation, are the subject of this paper. Beginning with a look at various national reports which are currently being produced, it is felt that these documents and the data gathering activities upon which they are based form the bulk of much of what is known about international social indicators. The same national reports, furthermore, confront many of the methodological and substantive issues which must be faced in cross-national projects with social data. The major activities involved in using international social indicators are comparison of conditions in various countries, cross-national programs of data collection, and multinational programs of data collection. The major portion of the paper presents an outline of some major international projects and a discussion of some on-going data collection activities which will provide important new information to the field of international social indicators. Discussion focuses on potentially comparative studies, juxtaposition of national data and cross-national data collection. Tables illustrate social changes in Japan and a typology of international social indicators. (Author/KSM)

ED 091263

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

INTERNATIONAL SOCIAL INDICATORS
an overview of on-going activities

Roxann A. Van Dusen
Social Science Research Council
Center for Coordination of Research on Social Indicators
1785 Massachusetts Avenue, N.W.
Washington, D.C. 20036

Paper prepared for discussion at the Annual Convention of the
International Studies Association in St. Louis, March 21, 1974

National Reports: The underlying data

In February 1974, the United States Government published its first collection of statistics selected and organized to describe social conditions and trends in the United States [53]. Entitled Social Indicators, 1973, the volume is organized around eight major social areas: health, public safety, education, employment, income, housing, leisure and recreation, and population. Within each of these eight categories, several broad areas of social concern are identified, and statistics are marshalled to reflect the state of those concerns. In the area of health, for instance, the volume focuses on three "social concerns": (1) a long life, (2) a life free from disability, and (3) adequate access to medical care. For each of the identified social concerns, one or more indicators have been selected, based on two main criteria: (1) the indicators measure individual or family (as opposed to institutional or government) well-being; and (2) the indicators measure products of, rather than inputs into social system. Thus, with this "output" or "product" focus, the volume reports individual educational attainment (e.g. degrees earned) rather than school budgets or classroom construction.

To give greater visibility to this important document, to guide users of Social Indicators, 1973, and to help its authors plan for the next issue, the Social Science Research Council's Center for Social Indicators sponsored a symposium to evaluate this document. Participants at the symposium included members of the Office of Management and Budget staff who were responsible for preparing the document, social scientists with research experience with such data, and representatives of statistical agencies of several other countries currently involved in the development of social indicators documents. The symposium had three major elements. First, it was divided into eight panel sessions for the purpose of detailed discussion of each of the eight chapters. Experts on the separate fields were invited to lead the discussions, and their comments as well as rapporteur notes form a major part of the background documentation which Professor Otis Dudley Duncan will use in preparing a review essay on Social Indicators, 1973. Second, at a plenary session following the chapter reviews, Professors Stephen Fienberg and Leo Goodman presented a critique of the document from the point of view of its statistical presentation: do the charts and tables provide an accurate representation of the data; is the discussion of the accuracy and error structure of the data adequate? And, third, and most important in the context of the present paper, Natalie Rogoff Ramsøy and Wolfgang Zapf presented papers in which they compared Social Indicators, 1973 to other national reports which are similar in (1) their selective presentation of statistics related to social policies and conditions; (2) their focus on individuals rather than institutions; and (3) their emphasis on social trends.

Social Indicators, 1973 joins a rapidly expanding literature of national reports. In 1973, Great Britain published its fourth issue of Social Trends [15], Japan issued its seventeenth report, entitled Whitepaper on National Life [20], and France and Germany both published their first such document [14,12]. Similar volumes, from Norway [25] and Sweden [30] are expected in 1974, and somewhat further in the future there will be a Canadian volume of social indicators, and perhaps some publications under the auspices of OECD.

These documents did not spring full-blown from government statistical office deliberations. Their antecedents include the growing literature on social indicators and the quality of life [4,6,11,21,28,54], as well as specific programmatic statements on what might (or should) be included in such prototypic "social reports" [10,13,19, 26,52].

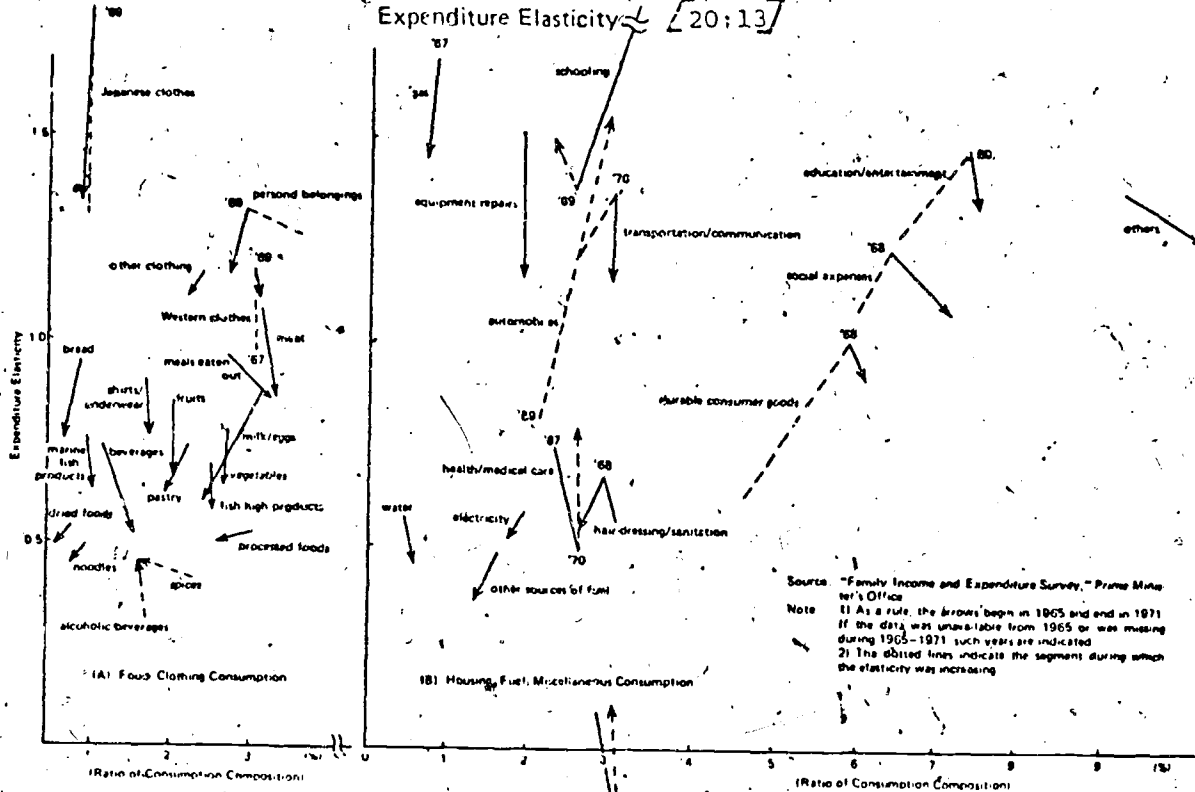
Despite the shared social indicators background, there is great variety among these national reports. Take, for instance, the "social concerns" approach of the United States and OECD. On the one hand, this "goal orientation" gives greater coherence to the document and permits greater selectivity in the statistics which are presented; on the other, it rules out topics for which a "social concern" cannot be stated, or on which there is debate. Thus, in Social Indicators, 1973, there is no information of family formation or consumption, for there is no consensus on desirable trends in family or consumption patterns. The issue highlighted here is whether such social reports should attempt a broad picture of the society generally, or whether they should focus on those societal elements for which policy manipulable variables can be identified, and on which goal consensus exists. This debate reflects another issue, and one which demands fuller attention: to whom are these national reports addressed? Is their purpose to inform public opinion about the nature and interrelationships of societal trends, or are they policy documents aimed at administrators? Do the two audiences require separate documents, or has the traditional separation of policy information from social "enlightenment" [5] prolonged a false dichotomy? This is a question which arises in international social reporting as well.

Another major difference among the several reports is the relative emphasis on "input" and "output" measures. The classic example of an input measure is "the number of hospital beds," which, as many have noted, is a singularly uninformative health indicator. There are two major arguments for the exclusion of input information from such documents. First, "outputs" give a more accurate picture of actual social conditions than do policy inputs. Second, and much more important, it is argued that we have only a rudimentary understanding of the fit between inputs - for instance, the number of teachers - and outputs - school performance, for example. In the absence of some idea of how the system works, to focus only on outputs may be the less misleading approach. On the other hand, as Dr. Ramsøy noted in her presentation at the symposium, the strict exclusion of input information risks the interpretation that nothing is being done about these social conditions. Thus, most of the other national reports attempt some balance between the two types of measures, and the Japanese effort is particularly successful in this regard [20]. It begins with information on the income of households, then charts household expenditures, and then examines changes in consumption and expenditure elasticities. A basic element of social change in post-war Japan is highlighted by the finding that many items which used to be considered luxuries are no longer considered dispensable. [See Table 1, page 3]

A third area in which comparisons among these documents can be made is in the variables that are chosen for disaggregation. The categories chosen depend, to a great extent, on the particular country: the United States' document uses age, sex and race as the major variables [53]; Canada's volume will stress regional and linguistic divisions [7]; and France uses nine occupational/class groups for its presentation [14]. Once again, the purpose of and audience for the document becomes a crucial question. For, social information presented by age, sex, race and other demographic categories forms a rather static picture of the society. Only when socio-economic information is provided - education, occupation, income, and the like - can one begin to imagine how changes in public policies might change the picture. Furthermore, the greater the range of background variables presented, the greater is the public's understanding of the complex processes involved, and incidentally, the greater are the opportunities for cross-national comparisons.

TABLE 1: Social Change in Japan

Figure 1-4. Changes in Consumption Composition Ratio and Expenditure Elasticity [20:13]



International Social Indicators: an overview

The subject of this paper is international social indicators. We have chosen to begin with a look at the various national reports which are currently being produced because it is these documents, and the data gathering activities on which they are based, which form the bulk of much of what is known as "international social indicators." Furthermore, many of the methodological and substantive issues which must be faced in the preparation of national reports must also be confronted in cross-national projects with social data.

What is meant by the term "international social indicators?" The social indicators literature, generally, has three main focuses: (1) assessment of the quality of life; (2) measurement of social change(s); and (3) program evaluation. International social indicators, we might suppose, implies some commitment to comparison of these elements.

Thus, whether data from different countries are juxtaposed in order to rank or compare conditions in those countries (quality of life), or to measure, analyze and understand changes in social conditions (social change), or to evaluate different public policies (program evaluation), "international social indicators" implies comparison. At a second level, international social indicators may imply a cross-national program of data collection. This is particularly the case when the indicators are not based on administrative data which countries routinely collect in routine ways, but on attitudinal information which is either not collected, or not collected in a way that permits comparison. The Andrews and Withey study of perceived life quality reflect such a situation [3]. And, at a third level, international social indicators may mean that the data collection and/or analysis is done by a multinational organization such as OECD or the United Nations. These organizations, after all, have the clearest mandate to develop comparative indicators, and have been in the business of doing so for a relatively long time.

These different aspects of international social indicators are not mutually exclusive. Indeed, within the broad analytical commitment to comparison and to presentation of statistics related to the social conditions of individuals and families, with emphasis on social trends, there is a wide variety of data. In the following, an outline of some major international projects is presented, after which there is a brief discussion of some on-going data collection activities which will provide important new information to the field of international social indicators.

Table 2:

A TYPOLOGY OF INTERNATIONAL SOCIAL INDICATORS
(with bibliographic references)

	<u>COVERAGE</u>		
	<u>Potentially comparative</u>	<u>Comparative</u>	
	<u>National data</u>	<u>Juxtaposition of national data</u>	<u>Cross-national collection of data</u>
Private Researchers	[3, 24]	[9, 22, 23, 27, 32]	[1, 2, 8, 17, 31]
National Governments	[6, 10, 12, 14, 15, 16, 19, 20, 25, 30, 48, 49, 50, 53]	[15, 51]	[29]
International Organizations	[39, 41, 42]	[18, 33, 34, 36, 37, 38, 40, 44, 46]	[29, 43]

"Potentially comparative" studies

There are studies which, although based on data from only one country, may be considered potentially comparative either in the way the data were collected or presented, or in the way they are stored or used. For instance, Ellen Mickiewicz and several colleagues have prepared a Handbook on Soviet Social Science Data specifically to enable cross-national comparisons which include the USSR [24]. The data, presented are time series, cover such topics as demography, agriculture, health, housing, education and communications; the series are disaggregated by urban/rural, male/female, and regional (national republic) background, and are presented, where possible, at decennial intervals to permit comparisons with regularly collected United Nations or other international data.

National governments also collect information on social trends in other countries, and many include such information, for comparison, in their own national report [15]. Indeed, the lack of such comparative information in the U.S. document is seen as a major drawback, not so much for the problems it poses for immediate comparisons, as for the long-term limitations which it implies for the United States' effort. For instance, the index for housing crowdedness used in the United States is persons per room; elsewhere, square meters per person is used, and there is no easy way that the two measures can be related. As long as these separate housing indicators are used, cross-national comparisons along this dimension are limited. Education provides another example: much of the educational attainment information presented in Social Indicators, 1973 is drawn from the U.S. National Assessment of Educational Progress (NAEP). The United States also participates in the International Association for the Evaluation of Educational Achievement [17]; however, the techniques and measures used in the two studies do not coincide, and by using the national rather than the cross-national data, the authors of the education chapter of Social Indicators, 1973 have limited its value for international comparisons. These examples point to the problem of coordination of research efforts between different data collection and analytical agencies - both within and between various countries; it is a problem which is neither unique to these particular types of data, nor unique to the United States.

A different type of "potentially comparative" data collected by national governments is represented by the U.S. Bureau of the Census' "Country Demographic Profiles" [48] and its "International Population Reports" [49,50]. The potential for comparison arises not only from the common framework which these studies use to present data, but also, more recently, from the trend toward entering the country demographic information into a time-sharing computer network to which there is easy access, and from which comparative time series can be drawn.

"Potentially comparative" studies are also carried out at the international level. UNESCO is now completing a five-year project - "Human Resources Indicators Project" - among the objectives of which were the identification and selection of indicators of human resources and the aggregation of these indicators into a general index. A number of countries were chosen in which to conduct more detailed review of human resources indicators in the context of the national economies [39,41,42], and these and other national studies have been used to develop measurement and analytical techniques for more meaningful comparisons [35,40,45].

Comparison: Juxtaposition
of national Data

There have been countless private studies involving cross-national comparisons. Indeed, the many survey archives - the Roper Public Opinion Research Center and the Inter-University Consortium for Political Research notable among them - have arisen in part from a demand to maintain in accessible and usable form the results of these previous efforts. Among the most recent, and most comprehensive, of these private efforts is Kingsley Davis' two volume study of world urbanization trends between 1950 and 1970 [9]; and Taylor and Hudson's massive World Handbook of Political and Social Indicators, the data from which is housed at I.C.P.R. [32].

National governments have also marshalled information from a variety of other nations, not only to provide summary comparisons with trends at home, as in the international section of Social Trends [15], but also to undertake a more detailed analysis of the nature of social processes. The U.S. Bureau of the Census has published a number of such studies, one of the more recent of which is The Two-Child Family and Population Growth: An international view [51].

Most often, private and national government research efforts along these lines rely on international compendia, most of which are familiar to the research community interested in international social indicators. It should be noted that the international agencies, which publish such documents, as the U.N. Demographic Yearbook and the U.N. Statistical Yearbook do not actually collect the data: they collate and juxtapose administrative, census, and other data collected for a variety of other reasons. Some of these international publications serve to codify and preserve these data [36, 37, 38]; others use these data in order to explore and improve measurement and analytical techniques [35, 40, 44, 45, 46].

Comparison: Cross-National
Data Collection

This level of research represents the most recent and most innovative involves in cross-national comparisons and, in large part, has resulted from recognition of the inadequacy of the administrative data usually available for indicator development. Some of these efforts, most of which are private and non-governmental, are highlighted below.

The International Association for the Assessment of Educational Achievement has already been mentioned. It is a non-profit, non-governmental research program based on a national probability sample of students in 21 countries. Three levels of students - 10 year olds, 14 year olds; and those in their last year of secondary school - have been tested on several areas of educational attainment: science, reading comprehension, literature, civic education, and French or English as a foreign language [17]. Information on teachers and schools, as well as students' backgrounds, interests and attitudes are also available. These data have been deposited in five data banks around the world, and publication of the data bank manuals is scheduled for mid-1974. As was noted earlier, the non-governmental nature of this project has had repercussions on its utility - in the United States, at least. The National Assessment of Educational

Progress, a U.S. Department of Health, Education, and Welfare project, is similar in aim to the IEA - namely, to discover what students are really learning, rather than simply how efficiently the system is processing them. However, there has been no coordination of research efforts between the two; as a result, different sampling procedures are used for different age groups, which are asked different sorts of questions. These shortcomings are highlighted less in the spirit of gloomy pessimism than in the hope that the two presumably on-going programs will increase their coordination in subsequent waves of data collection.

The results of a second international research project of great interest to social scientists were recently published in Alexander Szalai's The Use of Time [31]. The book represents fifteen time-budget studies conducted in twelve countries, and is divided into four parts: (1) a review of the consensus reached by the participating countries on principles of organization, research and analysis; (2) presentations of various substantive national and cross-national aspects of the data; (3) a wide spectrum of statistical tables reflecting variations in everyday life and behavior patterns for different social groups in the countries studied; and (4) a bibliography, by country, of selected time-budget literature. Of special interest to researchers is the promise that the data archives of the project are to be made available to scholars for further analysis.

A third project of interest is a cross-national level of living study known as the Scandinavian Survey [1]. Financed by the National Social Science Research Councils in each of the four Scandinavian countries, the survey was conducted in the spring of 1972 in an attempt to go beyond the "objective" data that are usually the focus of level of living studies. In addition to several indicators of standards of living - housing density and income - the survey also revealed attitudes towards friends, group memberships, and feelings of self-fulfillment. Presumably this information will be included in the Scandinavian national reports which are now being prepared [25,30], much as the British Social Trends has incorporated information from the General Household Survey in Great Britain [16]. The Scandinavian Survey, which makes use of a questionnaire developed by the Survey Research Center at the University of Michigan for measuring "Quality of Life," will also contribute to expertise in the collection and analysis of cross-national attitudinal data.

A fourth project worth mentioning is the World Fertility Survey [29], a five-year international research program which was begun in mid-1972. Its purpose is to assess the current state of human fertility throughout the world, principally through promoting and supporting nationally representative, internationally comparable sample surveys of fertility behavior in as many countries of the world as possible. Initiated in observance of World Population Year (1974), the World Fertility Survey will be carried out by the International Statistical Institute, in collaboration with the International Union for the Scientific Study of Population and the United Nations.

A fifth cross-national data collection project is a multinational comparative study of the migration of professional personnel from developing to developed countries, conducted by the United Nations Institute for Training.

and Research [43]. The project uses identical sampling procedures and identical questionnaires to study non-returning students and migrating professionals who stay on in the developed countries, as well as employers in the developing countries.

These studies represent the proverbial "tip of the iceberg" of cross-national data collection activities. The World Bank, for instance, has recently become interested in developing indicators for monitoring and evaluating its various projects - and more specifically, its projects in education. The World Health Organization is conducting a series of comparable, in-depth studies on maternal health in developing countries, much of the analysis of which is being done at the North Carolina Population Center in Chapel Hill. The Gallup survey organization has plans for a world-wide survey on the quality of life. And several committees of the International Sociological Association - the Committee on Social Stratification and the Committee on Community Research - have launched projects to coordinate cross-national research in these areas.

The projects which have been discussed here and those which are referenced in the bibliography, represent only a small portion of the work which has been and is being done. The purpose in presenting such a review is threefold. First, the various meanings or uses of the term "international social indicators" were examined, among them: (1) indicators collected and/or used by international organizations; (2) indicators based on cross-national data collection; and (3) indicators which can be, or are, juxtaposed to provide comparisons among countries. Second, the problems posed by the reification of the boundaries between private and governmental data collected were examined, and instances where that boundary has been or might be bridged were cited. In part these problems have resulted from the false dichotomy between the traditional uses of social indicators generally and, more particularly, from the assumption that the information which administrators need for decision-making is somehow different from the information which the public needs to understand the social changes of which they are a part and by which their lives are changed. And third, this paper has highlighted the wide variety of work that is already being done, and that is published or maintained in such a way that it is accessible for secondary research. It is hoped that this information will provide stimulus and encouragement to the broad, though largely uncoordinated international social indicators community.

BIBLIOGRAPHY

1. Allardt, Erik: About dimensions of welfare: An exploratory analysis of a comparative Scandinavian study. University of Helsinki, Research Group for Comparative Sociology. Research Reports, No.1, 1973.
2. Anderson, Odin W. Health Care: Can there be equity? The U.S., Sweden and England. New York: Wiley, 1972.
3. Andrews, Frank M. and Stephen B. Withey, "Some empirical results from the Andrews-Withey project on development of measures of perceived life quality," University of Michigan, Institute for Social Research. For presentation at the Annual Convention of the International Studies Association, St. Louis, March 21, 1974.
4. Bauer, Raymond A., ed. Social Indicators. Cambridge: MIT Press, 1966.
5. Biderman, Albert D. "Information, intelligence, enlightened public policy: functions and organization of societal feedback." Policy Sciences (1), 217-230.
6. Campbell, Angus and Philip E. Converse, eds. The Human Meaning of Societal Change. New York: Russell Sage Foundation, 1972.
8. Cantril, Hadley. The Pattern of Human Concerns. New Brunswick: Rutgers University Press, 1965.
9. Davis, Kingsley. World Urbanization 1950-1970, 2 vols. Berkeley: Institute of International Studies, Population Monographs, Nos. 4,9, 1969, 1972.
10. Delors, Jacques. Les Indicateurs Sociaux. Paris: S.E.D.E.I.S., Futuribles 15, 1971.
11. Duncan, Otis Dudley. Toward Social Reporting: Next Steps. Paper No. 2 in Social Science Frontiers Series. New York: Russell Sage Foundation, 1969.
12. FEDERAL REPUBLIC OF GERMANY. Gesellschaftliche Daten 1973. Bonn: Presse- und Informationsamt der Bundesregierung, 1973.
13. FINLAND. Economic Planning Centre. Quality of Life: Social goals and measurement. Helsinki: 1973.
14. FRANCE. Institut National de la Statistique et des Etudes Economiques (INSEE). Données Sociales, 1st edition. Paris: Imprimerie National, 1973.

GREAT BRITAIN

15. Central Statistical Office. Social Trends, Nos. 1-4. London: HMSO, 1970-1973.
16. Office of Population Censuses and Surveys, Social Survey Division, Central Statistical Office. The General Household Survey: Introductory Report. London: HMSO, 1973.
17. INTERNATIONAL ASSOCIATION FOR THE EVALUATION OF EDUCATIONAL ACHIEVEMENT (IEA).
Comber, L.C. and Keeves, John P. International Studies in Evaluation I: Science Education in Nineteen Countries, An Empirical Study. Stockholm: Almqvist & Wiksell, 1973.
Purves, Alan C. International Studies in Evaluation II: Literature Education in Ten Countries, An Empirical Study. Stockholm: Almqvist & Wiksell, 1973.
Thorndike, Robert L. International Studies in Evaluation III: Reading Comprehension Education in Fifteen Countries, An Empirical Study. Stockholm: Almqvist & Wiksell, 1973.
IEA Six-Subject Data Bank Bulletin. No. 1 (November, 1973) and No. 2 (March 1974). Contact: Jack Schwille, IEA, University of Stockholm FACK, S-104-05 Stockholm 50 Sweden.
IEA Newsletter. Contact. IEA, Box 6701, S-113 85 Stockholm, Sweden.
18. INTERNATIONAL LABOR ORGANIZATION. Labour Force Projections 1965-1985, Six Parts. Geneva: ILO, 1973.
- JAPAN
19. Economic Planning Agency. The Japanese and Their Society: Part 2 of the Report on National Life, 1972.
20. Economic Planning Agency. Whitepaper on National Life 1973: The Life and Its Quality in Japan. Tokyo: Overseas Data Service Co., Ltd., 1973.
21. Land, Kenneth C. and Seymour Spilerman, eds. Social Indicator Models. forthcoming.
22. Lynn, R. Personality and National Character. Oxford: Pergamon Press, 1971.
23. Michalos, Alex C. Fifth Working Outline of Quality of Life: A comparative social report for Canada and the United States. University of Guelph, Ontario, July 1973.

24. Mickiewicz, Ellen, ed. Handbook of Soviet Social Science Data. New York: Free Press, 1973.
25. NORWAY. Statistisk Sentralbyrå. Sosialt Utsyn. Oslo: forthcoming.
26. OECD. Social Indicator Programme, Vol. 1: List of Social Concerns Common to Most OECD Countries. Paris: OECD, 1973.
27. Paxton, John, ed. The Statesman's Yearbook: Statistical and Historical Annual of the States of the World for the Year 19--. New York: St. Martin's Press, annual.
28. Sheldon, Eleanor B. and Wilbert E. Moore, eds. Indicators of Social Change: Concepts and Measurements. New York: Russell Sage Foundation, 1968.
29. Sprehe, J. Timothy. "The World Fertility Survey: An international program of fertility research." U.S. Agency for International Development, Office of Population, n.d.
30. SWEDEN. Statistiska Centralbyrån. Social Utveckling. Stockholm, forthcoming.
31. Szalai, Alexander, ed. The Use of Time: Daily activities of urban and suburban populations in twelve countries. The Hague: Mouton, 1972.
32. Taylor, Charles L. and Michael C. Hudson. World Handbook of Political and Social Indicators, 2nd ed. New Haven: Yale University Press, 1972.

UNITED NATIONS

33. Department of Economic and Social Affairs. Growth of the World's Urban and Rural Population, 1920-2000. New York: 1969.
34. Department of Economic and Social Affairs. International Social Development Review. Nos. 1-4. New York: 1968-1972.
35. Secretariat. "Toward a System of Social and Demographic Statistics" (Preliminary version). ST/Stat. 68, 24 July 1973.
36. Statistical Office. U.N. Demographic Yearbook.
37. Statistical Office. U.N. Statistical Yearbook.
38. Statistical Office. U.N. Yearbook of International Trade Statistics.

UNITED NATIONS EDUCATIONAL, SOCIAL AND CULTURAL ORGANIZATION (UNESCO)

Social Science Projects on Human Resources Indicators.

39. Elliott, Charles. "Distributional Patterns of development and welfare: a case study of Zambia," Study XXVII. Paris: 1973.
40. Ivanovic, B. and S. Fanchette. "Grouping and ranking of 30 countries of sub-Saharan Africa." Paris: 1973.

41. Silvio-Pomonta, José F. "Typological study using the Wroclaw Taxonomic method" (A study of regional disparities in Venezuela," Study XXVIII. Paris: 1973.

42. Singer, H.W. and Stuart D. Reynolds. "Aspects of the distribution of income and wealth in Kenya," Study XXVI. Paris: 1973.

UNITED NATIONS INSTITUTE FOR TRAINING AND RESEARCH (UNITAR). Multinational Comparative Project on the Migration of Professional Personnel from Developing to Developed Countries.

43. Hekmati, Mehri and William A. Glaser. "The brain drain and UNITAR's national research project on the subject." Social Science Information 12, 2 (1973), 123-38.

UNITED NATIONS RESEARCH INSTITUTE FOR SOCIAL DEVELOPMENT

44. Bastex, Nancy and Wolf Scott. Levels of Living and Economic Growth: A comparative study of six countries 1950-1965. Geneva: 1969.

45. Drewnowski, Jan., Studies in the Measurement of Levels of Living and Welfare. Report 70/3. Geneva: 1970.

46. McGranahan, D.V., et al. Contents and Measurement of Socioeconomic Development: A staff study of UNRISD. New York: Praeger, 1972.

47. Scott, Wolf, et al. "The measurement of real progress at the local level: examples from the literature and a pilot study." Geneva: UNRISD, 1973.

UNITED STATES

Bureau of the Census. Country Demographic Profiles. Social and Economic Statistics Administration.

48. "Republic of China - Taiwan" (January 1974).

Bureau of the Census. Foreign Demographic Analysis Division. International Population Reports.

49. "Estimates and Projections of Educational Attainment in the USSR, 1950-1985" 1967.

50. "Estimates and Projections of Specialized Manpower in the USSR: 1950-1975" 1970.

51. Bureau of the Census. Population Division. International Statistical Programs. The Two-Child Family and Population Growth: An International View. Washington DC: U.S.G.P.O., 1970.

52. Department of Health, Education, and Welfare. Toward a Social Report.
Washington DC: U.S.G.P.O., 1969.

53. Executive Office of the President. Office of Management and Budget.
Social Indicators, 1973. Washington, DC: U.S.G.P.O., 1973.

54. Wilcox, Leslie D., et al., eds. Social Indicators and Societal Monitoring:
An Annotated Bibliography. San Francisco: Jossey-Bass, 1972.